ALATORTSEV, S.A.---(continued) Card 2.

KIT, I.K., zamestitel' glavnogo red.; SHESHKO, Ye.F., zamestitel' otv.red.; BUGOSLAVSKIY, Yu.K., red.; BYKHOVSKAYA, S.N., red.; DIONIS'YEV, A.I., kand.tekhn.nauk, red.; KOZIN, Yu.V., red.; SOKOLOVSKIY, M.M., red.; YASTREBOV, A.I., red.; DEMIDYUK, G.P., kand.tekhn.nauk, red.; KRIVSKIY, M.N., kand.tekhn.nauk, red.; LYUBIMOV, B.N., inzh., red.; MOLOKANOV, P.L., inzh., red.; REISH, A.K., inzh., red.; RODIONOV, L.Ye., kand.tekhn.nauk, red.; SLAVUTSKIY, S.O., inzh., red.; TRAKHMAN, A.I., inzh., red.; TRYMOVSKIY, L.G., inzh., red.; FIDELEV, A.S., doktor tekhn.nauk, red.; SHUKHOV, A.N., kand.tekhn.nauk, red.; TER-IZRAEL'YAN, T.G., red. izd-va; PROZOROVSKAYA, V.L., tekhn.red.; KONDRAT'YEVA, M.A., tekhn.red.

(Continued on next card)

ALATORTSEV, S.A.---(continued) Card 3.

[Mining; an encyclopedic dictionary] Gornoe delo; entsiklopedicheskii spravochnik. Glav.red.A.M.Terpigorev. Chleny glav. red.A.I.Baranov i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.10. [Mining coal deposits by the open-cut method] Razrabotka ugol'nykh mestorozhdenii otkrytym sposobom. Redkollegiia toma; N.V.Mel'nikov i dr. 1960. 625 p.

(MIRA 13:2)

1. Chlen-korrespondent AN SSSR (for Mel'nikov).
(Coal mines and mining) (Strip mining)

SIMKIN, B.A., kand.tekhn.nauk; MEDVEDEV, L.A.; PAKHOMOV, Ye.M., gornyy inzh.; SHIBANOV, V.I., gornyy inzh.

Open-cut mining of "Stoylenskoye" and "Yuzhno-Lebedinskoye" deposits. Gor.zhur. no.9:14-19 S '60. (MIRA 13:9)

1. Institut gornogo dela AN SSSR, Lyubertsy, Moskovskoy oblasti.
(Kursk Magnetic Anomaly) (Strip mining)

MEL'NIKOV, Nikolay Vasil'yevich; SIMKIN, Boris Aleksandrovich; DEMIN, Aleksandr Maksimovich; MEN'SHOV, Vasiliy Semenovich; SHEVYAKOV, L.D., akademik, otv. red.; PEVZNER, G.Ye., red. izd-va; SHEVCHENKO, G.N., tekhn. red.

[Principles of new technology and of the mechanization of open-pit mining; developing iron-ore deposits of the Kursk Magnetic Anomaly] Printsipy novoi tekhnologii i mekhanizatsii otkrytykh gornykh rabot; osvoenie zhelezorudnykh mestorozhdenii Kurskoi magnitnoi anomalii. Moskva, Izd-vo Akad. nauk SSSR, 1961. 166 p. (MIRA 14:11)
(Kursk Magnetic Anomaly—Iron mines and mining)

MEL'NIKOV, N.V.; SIMKIN, B.A., kand.tekhn.nauk; PAKHOMOV, Ye.M., gornyy inzh.

Possibilities of open-pit mining of rich ores and iron quartzites in the Kuznetsk Magnetic Anomaly. Gor. zhur. no. 1:22-25 Ja '61. (MIRA 14:1)

1. Institut gornogo dela AN SSSR, Lyubertsy, Moskovskoy obl.
2. Chlen-korrespondent AN SSSR (for Mel'nikov).
(Kursk Magnetic Anomaly--Iron mines and mining)
(Strip mining)

RZHEVSKIY, V.V., prof.,dokt.tekhn.nauk; BUYANOV,Yu.D., kand.tekhn.nauk; VASIL'YEV, Ye.I., kand.tekhn.nauk; DEMIN, A.M., kand.tekhn.nauk; KULESHOV, N.A., kand.tekhn.nauk; MEN'SHOV, B.G., kand.tekhn.nauk; NEVSKIY, V.N., kand.tekhn.nauk; POTAPOV, M.G., kand.tekhn.nauk; RODIONOV, L.Ye., kand.tekhn.nauk; SIMKIN, B.A., kand.tekhn.nauk; SUKHANOVA, Ye.M., kand.tekhn.nauk; YUMATOV, B.P., kand.tekhn.nauk; KHOKHRYAKOV, V.S., kand.tekhn.nauk; ALEKSANDROV, N.N., gornyy inzh.; ARISTOV, I.I., inzh.; BUGOSLAVSKIY, Yu.K., gornyy inzh.; DIDKOVSKIY, D.Z., inzh.; ONOTSKIY, M.I., inzh.; STAKHEVICH, Ye.B., inzh.; GEYMAN, L.M., red.izd-va; MAKSIMOVA, V.V., tekhn. red.; KONDRAT'YEVA, M.A., tekhn. red.

[Handbook for the strip-mine foreman] Spravochnik gornogo mastera kar'era. Pod red. V.V.Rzhevskogo. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1961. 572 p. (MIRA 14:12)

(Strip mining)

MEL'NIKOV, Nikolay Vasil'yevich, akademik; SIMKIN, Boris Aleksandrovich, kand. tekhn. nauk; DEMIDYUK, Grigoriy Prokop'yevich, kand. tekhn. nauk; VINITSKIY, Konstantin Yefimovich, kand. tekhn. nauk; STAKHEVICH, Yekaterina Borisovna, inzh.; KRASNIKOV, Aleksey Sergeyevich, kand. tekhn. nauk; CHERNEGOV, Yuriy Aleksandrovich, inzh.; POTAPOV, Mikhail Gennad'yevich, kand. tekhn. nauk; CHESNOKOV, Mitrofan Mitrofanovich, kand. tekhn. nauk; NURMUKHAMEDOVA, V.F., red. izd-va; SHKLYAR, S.Ya., tekhn. red.

[Foreign technique of open-pit mining]Tekhnika otkrytykh gornykh rabot za rubezhom. Moskva, Gosgortekhizdat, 1962. 379 p. (MIRA 16:1)

(Strip mining)

SIMKIN, B.A., kand. tekhn. nauk; LOPATIN, Yu.S., inzh.

Selection of optimum conditions for using drilling rigs
with roller bits in open-pit mines. Ugol' 38 no.9:30-33
S '63. (MIRA 16:11)

SIMKIN, B.A., kand. tekhn. nauk

Standardization of boring machines for strip mining operations. Gor. zhur. no.4:40-43 Ap '65. (MIRA 18:5)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut podzemnogo i shakhtnogo stroitel'stva, Moskva.

1. B. M. SIMKIN

2. USSR (600)

4. Agriculture - Study and Teaching

7. Work practice of three-year courses in animal husbandry and crops. Dost. sel'khoz. no. 1. 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

SIMKIN, B.M.

High yields depend on correct crop rotations. Zemledelie 6 no.6: 58-60 Je '58. (MIRA 11:6)
(Mogilevsk District—Rotation of crops)

ACC NR: AP6028952 SOURCE CODE: UR/0121/66/000/008/0009/0013

AUTHORS: Ryabchikov, A. N.; Tikhonov, V. M.; Simkin, D. I.

ORG: none

TITLE: Atomizing device for lubricant-coolant fluids

SOURCE: Stanki i instrument, no. 8, 1966, 9-13

TOPIC TAGS: atomization, atomizer, cutting fluid/ UR-3 atomizer, UR-3A atomizer, UR-3M atomizer

ABSTRACT: Atomizing apparatus UR-3 (Author Certificate No. 152162) for water-based lubricant-coolant fluids is described in detail, and some performance curves and calculations are presented. The apparatus was developed at NILSI at Gorkiy Polytechnic Institute imeni A. A. Zhdanov (NILSI pri Gor'kovskom politekhnicheskom institute) and is schematically shown in Fig. 1; details of the distributor and mixer systems for models UR-3, UR-3A, and UR-3M are presented in the report. The major feature of this device is the absence of throttling slits in the fluid passages, with fluid flow control accomplished by distribution of the air flow. This permits minimum fluid passage dimensions of 2.5--3.5 mm that are large enough to prevent clogging (a common problem in atomizers with fluid throttling controls). The apparatus has a capacity of up to 500 g/hr of water-based lubricant with as little as 3 g/hr of atomized lubricant flow.

UDC: 621.91.079:621.892-729:66.069.82

Card 1/2

ACC NR: AP6028952

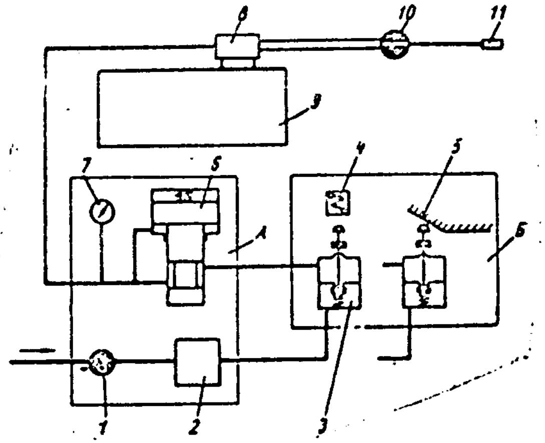

Fig. 1. Schematic diagram of UR-3 lubricant atomizer. 1 - valve; 2 - filter-dehumidifier; 3 - three-way valve; 4 - solenoid; 5 - cam; 6 - air pressure regulator; 7 - manometer; 8 - distributor; 9 - tank; 10 - mixer; 11 - nozzle

Orig. art. has: 7 figures and 4 formulas.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 009

Card 2/2

MAMYKIN, P.S.; USKUMBAYEV, N.U.; RAVDANIS, B.I.; YAKUSHEV, Ye.A.; PSHENBAYEV, R.G.;
SIMKIN, E.A.

Testing high-alumina refractories. TSvet.met. 38 no.3:35-36 Mr '65.
(MIRA 18:6)

GADIYEV, S.M.; SIMKIN, E.M.

Directional hydraulic fracturing with a hydraulic erosion jet of varying pressure. Dokl. AN Azerb. SSR 20 no.4:19-28 '64. (MIRA 17:7)

1. Institut geologii i razrabotki goryuchikh iskopayemykh. Predstavleno akademikom AN AzerbSSR M.M.Aliyevym.

SIMKIN, E.M.; KALUGIN, V.D.; RAKHIMOV, A.R.; SHEYNMAN, A.B.

Electric heating of well bottom zones in the South Alamyshik field. Nefteprom. delo no.8:16-19 '65. (MIRA 18:9)

1. Institut geologii i razrabotki goryuchikh iskopayemykh, Moskva, i ob"yedineniye "Ferganaheftegaz".

SIMKIN, G.E.

Two-stage washing of lime sludge on vacuum filters. G. E. Simkin. *Bumazh. Prom.* 25, No. 6, 19-24(1950).—~~The cellular~~ vacuum filter "Bol'shevik" is superior to the "Imperial" filter for washing lime sludge. In view of the settling characteristics of lime suspension in causticized liquor with the use of starch, the sludge should be washed in 2 stages. This increases the output of the settling basins; av. content of Na_2O in sludge decreased from 2.96 to 1.15%. Av. loss of Na_2O per basin was 55 kg. B. Z. Kamich

SIMKIN, G.E., inzhener.

Chart on quick cooking of sulphate wood pulp. Bum.prom. 28 no.7:24-28 Jl '53. (MLRA 6:7)

1. Novo-Lyalinskiy tsellyulozno-bumazhnyy kombinat. (Wood-pulp industry)

SIMKIN, G. E.

Kraft cooking with high alkali consumption. G. E. Simkin. *Bumazh. Prom.* 29, No. 4, 18-19(1954).—The effect of high alky. on the properties of kraft pulp was studied. No testing procedures or methods of analysis are given. Pine chips were cooked in a 10-l. rotary digester with com. white liquor and 150° as max. temp., initial liquor to wood ratio of 5.25 to 1, and 50% NaOH (based on oven-dry wood). For times to reach 150° of 2.5, 4, and 5 hrs., periods at 150° of 1, 1.75, and 2 hrs., the sulfidities of the white liquor (I) were 25.6, 24.5, and 25.1% and of the black liquor (II) 31.0, 29.2, and 27.7%; the g./l. active alkali (as NaOH) in the black liquor (III) 77.2, 68.5, and 65.0; pulp yield (IV) 63.1, 61.2, and 52.0%; KMnO$_4$ nos. (Björkman?) (V) 148.4, 144.8, and 137.8; % α-cellulose (VI) —, 93.85, and 94.0; and % lignin (VII) —, 20.2, and—. The pulps produced under these conditions had breaking lengths in m. (VIII) of 3300, 6890, and 7890; double folds (IX) of 430, 1289, and 1819; tear value in g. (X) of 155.2, 139.2, and 168.0; bursting strengths in kg./sq. cm. (XI) of 2.2, 6.0, and 5.9; and air permeabilities in cc./min. (XII) of 364, 67, and 150, resp. The wood-to-liquor ratio was increased from 5.25 to 7 and the alkali concn. decreased from 96 to 72 g./l. NaOH. For a max. temp. of 150°, 50% NaOH (based on oven-dry wood), time required to reach 150° of 2.5, 4.0, and 5.0 hrs., and time at 150° of 1.0, 1.75, and 2.0 hrs., I = 24.8, 25.3, and 24.4; II = 25.8, 21.5, and 18.9; III = 54.4, 50.4, and 64.0; IV = 57.7, 53.5, and 52.9; V = 142.9, 141.2, and 130.7; VI = —, 94.65, and 94.65; VII = 18.0, 12.0, and 10.5; VIII = 6320, 7130, and 7694; IX = 840, 2356, and 2982; X = 112, 149, and 192; XI = 5.3, 6.2, and 5.3; and XII = 50, 51, and 109. For a max. temp. of 150°, 4 hrs. rise to 150°, and 2 hrs. at 150°, corresponding values for I-VII were 24.3, 17.9, 71.0, 48.6, 137.7, 92.0, and 9.4. For a max. temp. of 160°, 5 hrs. to 160 and 2 hrs. at 160°, corresponding values for I-VII were 25.5, 14.1, —, 42.1, 118.2, 94.72, and 5.4 John Lake Keays

SIMKIN, G.N.; IL'ICHEV, V.D.

Geographical variability of the voice of animals as an ecologic and evolutionary problem. Zool. zhur. 44 no.4: 483-493 '65. (MIRA 18:6)

1. Moskovskiy gosudarstvennyy universitet.

SIMKIN, G.N.

Types of ear cavities in mammals as related to the characteristics of the way of life. Zool.zhur. 44 no.10:1538-1545 '65. (MIRA 18:11)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta.

SHILOVA, S.A.; SIMKIN, G.N.

Biology of forest lemmings (Myopus schisticolor Lill) in nidi of tick-borne encephalitis in Perm Province. Nauch. dokl. vys. shkoly; biol. nauki no.2:58-61 '58. (MIRA 11:10)

1.Predstavlena kafedroy zoologii pozvonochnykh Moskovskogo gosudarstvennogo universiteta imeni M.V. Lononosova.
(Perm Province--Lemmings) (Rodents as carriers of disease)

KIRZON, M.V.; DUKEL'SKAYA, N.M.; BORISOVA, L.B.; SIMKIN, G.N.

Specific differences of the process of diftoran poisoning in animals. Vest. Mosk. un. Ser. 6: Biol., pochv. 16 no.4:26-33 Jl-Ag '61. (MIRA 14:7)

1. Kompleksnaya laboratoriya po izucheniyu sredstv i sposobov bor'by s vrednymi zhivotnymi i boleznyami rasteniy Moskovskogo gosudarstvennogo universiteta.

(FLUORINE ORGANIC COMPOUNDS)
(RODENTICIDES)

[illegible], G.N.

Geographical variation of the numerical dynamics of Ixodes persulcatus. Biul.MOIP.Otd.biol. 67 no.4:145-146 Jl-Ag '62. (MIRA 15:10)

(PERM PROVINCE—TICKS)

SHILOVA, S.A.; CHABOVSKIY, V.I.; MOROZOV, Yu.V.; SIMKIN, G.N.;
VASIL'YEV, B.D.; KRYLOV, D.G.; GOLOVLEV, Ye.L.

Epizootiological importance of birds in foci of tick-borne encephalitis in the Central Urals. Ornitologiia no.6:126-139 '63. (MIRA 17:6)

NAUMOV, N.P.; SIMKIN, G.N.; IL'ICHEV, V.D.

Spatial orientation of animals and the problem of controlling their behavior. Nauch. dokl. vys. shkoly; biol. nauki no.1:11-17 '64.
(MIRA 17:4)

SIMKIN, G.N.; [illegible]

Acoustic role of the external ear in mammals. Nauch. dokl. vys. shkoly; biol. nauki no.1:43-45 '65. (MIRA 18:2)

1. Rekomendovana kafedroy zoologii pozvonochnykh Moskovskogo gosudarstvennogo universiteta.

SIMKIN, G.S.

Universal microscope measurement of the base spacing of gearing used in metrology. Izm. tekh. no.2:54-55. Mr-Ap '55.
(Gearing--Measurement) (MIRA 8:9)

BRYZZHEV, L.D.; BURDUN, G.D.; LEYKIN, A.Ya.; OKHOTINA, S.M.; SIMKIN, G.S.;
SHPAN'ON, P.A.

Precise determination of the units of time and frequency by means of atomic constants. Izm. tekh. no.3:3-9 My-Je '55. (MLRA 8:9)
(Time measurements)

SIMKIN, G.S.

Testing the pitch of base circle of slotted calipers. Izm. tekh. no.3: 54-55 My-Je '55. (MLRA 8:9)
(Calipers)

SIMKIN,G.S.

Profilographic and counterpart measurement of large straight-tooth gears. Izm.tekh.no.4:47-49 Jl-Ag '55. (MLRA 8:10)
(Odontograph) (Gearing)

USSR/Optics - Optical Technique, K-4

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35701

Author: Simkin, G. S.

Institution:

Title: Use of Ocular Head with Double Image

Original Periodical: Izmerit. tekhnika, 1955, No 5, 57

Abstract: The ocular head with double image is used to measure the diameter of holes and distances from the scribe mark to the cutting edge in a microtome. Double matching is employed by coincidence of the opposite edges. The recommended magnification is 50x. The measurement error is on the order of 0.7-1 mu.

Card 1/1

SIMKIN, G.S.

Errors in linear scales of universal microscopes. Izm. tekh. no.4: 16-20 Jl-Ag '57. (MLRA 10:8)

(Microscope)

24(0); 5(4); 6(2) PHASE I BOOK EXPLOITATION SOV/2215

Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni D.I. Mendeleyeva

Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific Research Abstracts; Collection of Articles, Nr 2) Moscow, Standartgiz, 1958. 139 p. 1,000 copies printed.

Additional Sponsoring Agency: USSR. Komitet standartov, mer i izmeritel'nykh priborov.

Ed.: S. V. Reshetina; Tech. Ed.: M. A. Kondrat'yeva.

PURPOSE: These reports are intended for scientists, researchers, and engineers engaged in developing standards, measures, and gages for the various industries.

COVERAGE: The volume contains 128 reports on standards of measurement and control. The reports were prepared by scientists of institutes of the Komitet standartov, mer i izmeritel'nykh priborov pri Sovete Ministrov SSSR (Commission on Standards, Measures, and Measuring Instruments under the USSR Council of Ministers). The participating institutes are: VNIIM - Vsesoyuznyy nauchno-issledovatel'skiy metrologii imeni D.I. Mendeleyeva (All-Union Scientific Research Institute of Metrology imeni D.I. Mendeleyev) in Leningrad; Sverdlovsk branch of this institute; VNIIK - Vsesoyuznyy nauchno-issledovatel'skiy institut Komiteta standartov, mer i izmeritel'nykh priborov (All-Union Scientific Research Institute of the Commission on Standards, Measures, and Measuring Instruments), created from MOIMIP - Moskovskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Moscow State Institute of Measures and Measuring Instruments) October 1, 1955; VNIIFTRI - Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific Research Institute of Physicotechnical and Radio-engineering Measurements) in Moscow; KhGIMIP - Khar'kovskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Khar'kov State Institute of Measures and Measuring Instruments); and NGIMIP - Novosibirskiy gosudarstvenyy institut mer i izmeritel'nykh priborov (Novosibirsk State Institute of Measures and Measuring Instruments). No personalities are mentioned. There are no references.

Pokras, S.I., and M.B. Zalmanzon (NGIMIP). Studying a Screw Pair 14

Simkin, G.S. (KhGIMIP). Measuring the Tooth Profile of Large-diameter Reduction Gears 15

Simkin, G.S., and I.L. Rabinovich (KhGIMIP). Investigating Instruments and Methods for Measuring Elements of Worm Gears 16

Osmolovskaya, Ye.P., and B.S. Davydov (MGIMIP). Comparative Rating of Probe and Contactless Gages for Measuring Surface Finish 16

Yegorov, V.A., B.S. Davydov, V.P. Kurnosenko, and T.S. Labutina (MGIMIP). Developing a Method for Testing Surface Finish Samples and Instruments for Surface Finish Quality Control 1

Boguslavskiy, M.G. (VNIIM). Making Improved Surface Finish Test Samples 18

Finkel'shteyn, I.Ye. (NGIMIP). Developing Methods and Means of

Card 5/27

SIMKIN, G.S.; FOMINA, O.P.

Measuring ripples on bearing rings. Izm.tekh. no.2:11-13 Mr-Ap '58.
(MIRA 11:3)

(Bearings (Machinery))
(Measuring instruments)

AUTHOR: Simkin, G.S. SOV-115-58-4-6/45

TITLE: Determining the Linear Measurement Error Caused by Skew-Distortions (Opredeleniye pogreshnosti izmereniya lineynykh razmerov, obuslovlennoy perekosami)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 4, pp 15-18 (USSR)

ABSTRACT: The author discusses the distribution of errors in linear measurement caused by an angular distortion between the gage and the object being measured, and gives formulae for calculating the extent of this error in different types of measurement. There are 3 diagrams, 1 graph and 2 Soviet references.

1. Measurement--Errors

Card 1/1

SOV/115-59-4-1/27

28(5)

AUTHOR: Simkin, G.S.

TITLE: Some Problems of Applying Random Functions in Metrological Practice (Nekotoryye voprosy primeneniya sluchaynykh funktsiy v metrologicheskoy praktike)

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 4, pp 1-4 (USSR)

ABSTRACT: The author states that the theory of random magnitudes, or the theory of random errors, used for investigating measuring instruments accuracy, are inadequate in a number of cases, since these theories are independent of the instrument parameters. Therefore, he recommends the application of random functions, which depend on one or several instrument parameters. In a number of cases, the application of random functions for the investigations of measuring instrument accuracy will produce a more complete characteristic of the latter. The development and the application of the theory of random functions deals basically with functions in which

Card 1/4

[illegible]-59-4-1/27

Some Problems of Applying Random Functions in Metrological Practice

the time (t) is a parameter. Therefore, it is frequently called the theory of random processes, or the theory of stochastic processes. However, the theory of stochastic processes may be used in a number of cases for random functions in which length, temperature, pressure, etc. are parameters. The basic characteristics of the theory of random magnitudes, mathematical expectation, dispersion and correlation, are also used in the theory of random functions. Here, these characteristics are functions of some parameters, i.e.

$$m_x(P) = M[x(P)]$$

$$D_x(P) = D[x(P)]$$

$$\sigma_x(P) = \sqrt{D[x(P)]}$$

$$k_x(P,P') = M[x(P) - m_x(P)][x(P') - m_x(P')]$$

Card 2/4

SOV/115-59-4-1/27

Some Problems of Applying Random Functions in Metrological Practice

whereby x(P) is the random function of the parameter (P); M x(P) is the mathematical expectation of the random function; D x(P) is the dispersion of the random function; $k_x(P,P')$ is the correlation function which is sometimes called autocorrelation function. The author then considers briefly the calculation of the random function characteristics. Using table 1, the author presents three formulae:

$$m_x(P_1)=\frac{{}_{i=1}\; x_i(P_1)}{n}$$

$$\sigma_x(P_1)=\frac{{}_{i=1}\; [x_i(P_1)-m_x(P_1)]^2}{n-1}$$

Card 3/4

SOV/115-59-4-1/27

Some Problems of Applying Random Functions in Metrological Practice

$$p_x(P_1,P_K)=\frac{\sum_{i=1}\left[x_i(P_1)-m_x(P_1)\right]\left[x_i(P_K)-m_x(P_K)\right]}{\sigma_x(P_1)\sigma_x(P_K)(n-1)}$$

He uses these formulae on three examples for demonstrating the error determination of glass dials, dial indicators and micrometers, whereby the latter were produced by the plants "Krasnyy instrumental'shchik" and "Kalibr". There are 1 graph, 3 tables and 7 Soviet references.

Card 4/4

96662

P/034/60/000/003/003/005
A222/A026

16.6100 (also 1031)

AUTHOR: Simkin, G.S.

TITLE: On Some Application Problems of Random Functions in Metrology

PERIODICAL: Pomiary-Automatyka-Kontrola, 1960, No. 3, pp. 103-104

TEXT: The article is a translation of the Russian-language item "Nekotoryye voprosy primeneniya sluchaynykh funktsyy v metrologicheskoy praktike" which appeared in the periodical Izmeritelnaya Tekhnika, 1959, No. 4 (Translator: Master Franciszek Wielądek). The application of random functions in linear measurements is briefly analyzed and instructions are given on the calculation of the expected value, variance, and correlation function, which are basic characteristics of random functions for glass dials, dial gauges and micrometers. The theory of random functions mostly pertains to time-parameter functions and therefore is frequently called a theory of stochastic processes (Ref. 1, 2, 3). Results obtained by means of the theory of stochastic processes may, in a number of cases, be applied to random functions whose parameters are length, temperature, pressure etc. Just as expected value, variance and the correlation coefficient (for two or more variables) are basic characteristics in the theory of random variables, the same characteristics are introduced in the theory of random func-

Card 1/4

86663

P/034/60/000/003/003/005
A222/A026

On Some Application Problems of Random Functions in Metrology

tions with the only difference that they are functions of a certain parameter P:

$$Ex\ (P) = E\ [x(P)] \quad (1)$$

$$Dx\ (P) = D\ [x(P)] \quad (2)$$

$$\sigma x\ (P) = \sqrt{D\ [x(P)]} \quad (3)$$

$$k_x(PP') = E\left[x(P) - Ex(P)\right]\left[x(P') - Ex(P')\right] \quad (4)$$

where x(P) is the random function of the parameter P; E[x(P)] is the expected value of the random function; D[x(P)] is the variance of the random variable; k(PP') is the correlation function. The expected value E is denoted by the letter M in the original Russian-language item. As an example of error designation for glass dials, a table gives the numerical values Ex(l), σx(l) and ρx(l,l'), where l is 1, 2, ... 10, for 20 100-mm glass dials computed on the basis of the dial certificates. As an example of error designation for dial gauges, errors were computed for 50 dial gauges with a 0.01-mm dial and a range of from 0 to 10 mm, as well as 50 dial gauges with a range of from 0 to 5 mm, made by the plant "Krasnyy Instrumentalshchik". Another table presents the numerical values of Ex(l), σx(l) and ρx(l,l') for 0 ÷ 10 mm gauges. Because the variations of Ex(l'), which depend on the number of revolutions, are small, it

Card 2/4

P/034/60/000/003/003/005
A222/A026

On Some Application Problems of Random Functions in Metrology

may be assumed that $Ex\ l = \text{const} = 1.9\mu$

The dependency of the characteristics $\sigma x(l)$ and $\rho x(l)$ on gauge revolutions or needle deflection is considerable. The values, as computed by the method of least squares, are:

$$\sigma x(l) = (3.7 + 0.37\ l)\mu \qquad (12)$$

$$\rho x(l) = 1.19^{0.15\ l} \qquad (13)$$

where $l = 1, 2, \ldots\ldots\ 10$. Error analysis of 50 gauges with the range of 0 ÷ 5 mm results in:

$$Ex(l) = \text{const} = 1.7\mu \qquad (14)$$

$$\sigma x(l) = (3.8 + 0.40\ l)\mu \qquad (15)$$

The third and last example of error determination concerns micrometers. Test results have been worked out for 100 micrometers with the range 0 ÷ 25 mm made by the "Kalibr" Plant and for 50 identical micrometers made by the "Krasnyy Instrumental'shchik" Plant. The results for the lot of 100 micrometers are:

Card 3/4

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A222/A026

On Sombe Application Problems of Random Functions in Metrology

$$Ex(l) = (-1.2 + 0.08\ l)\mu \qquad (16)$$

$$\sigma x(l) = (1.8 + 0.05\ l)\mu \qquad (17)$$

$$\rho x(l) = 1.5_{e}^{-0.3\ l} \qquad (18)$$

and for the lot of 50 micrometers:

$$Ex(l) = (-0.05 + 0.08\ l)\mu \qquad (19)$$

$$\sigma x(l) = (2.3 + 0.025\ l)\mu \qquad (20)$$

$$\rho x(l) = 1.6_{e}^{-0.33\ l} \qquad (21)$$

where l specifies displacement of the micrometer screw. There are 3 tables, 1 figure and 7 Soviet references.

Card 4/4

SIMKIN, G.S.

Diffraction correction for a two-beam radio interferometer with a closed arm. Izm.tekh. no.4:45-50 Ap '60.
(MIRA 13:8)

(Interferometer)

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S/115/60/000/008/010/013
B019/B063

AUTHORS: Simkin, G. S., Naberezhnykh, V. P., Lukin, I. V.

TITLE: High-frequency Light Modulation 21 (10^{10} cps)

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 8, pp. 41-43

TEXT: The authors of the present paper give a report on an investigation carried out at the Khar'kovskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Khar'kov State Institute of Measures and Measuring Instruments) for the purpose of studying the possibility of light modulation with a frequency of 10^{10} cps by means of a Kerr cell filled with nitrobenzene. The Kerr condenser in the experimental arrangement (Fig. 1) is a piece of a special right-angled waveguide. The high-frequency field is transferred to the Kerr condenser by means of two waveguides flanged to the Kerr cell. The high-frequency field was applied to the Kerr cell in the form of pulses with a pulse-recurrence frequency of 1200 cps. The pulses were generated by a magnetron oscillator. These high-frequency pulses led to the propagation of sound waves in the nitrobenzene, which entailed a change in the refractive index of the nitrobenzene. The change

Card 1/2

SIMKIN, G.S.; GAFANOVICH, G.Ya.

Investigating the precision of involute profile measuring devices. Izm.tekh. no.6:8-10 Je '61. (MIRA 14:5)
(Measuring instruments--Testing)

SIMKIN, G.S.; CHECHIK, I.I.

Reference book on linear measurements. Translated from the German. (MIRA 14:5)
Izm.tekh. no.6:61-62 Je '61.
(Length measurment)

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S/115/61/000/010/002/005
E198/E135

1.5000

AUTHORS: Simkin, G.S., Lukin, I.V., and Biryukov, L.I.

TITLE: Radio interferometer for measuring large lengths

PERIODICAL: Izmeritel'naya tekhnika, no.10, 1961, 8-10

TEXT: The KhGIMIP has elaborated a method using a two-beam radio interferometer on centimetre waves, designed for checking large inside gauges and fixed mark measures. The interferometer is based on Froome's apparatus for measuring the velocity of light. The operational principle of the instrument is illustrated in the diagram. The generator (2) radiates energy on centimetre waves along the wave guide to A, where it is divided; one beam goes outside through a lens mounted in a conical outlet (7), the other is directed in the opposite way to a closed limb (8) containing an interference attenuator. Both beams are reflected back to A, the outer one having met a plane mirror (5) placed at a variable distance, 6 to 20 m, and mounted on a carriage (4) which moves along the rails (6) in the direction of the beam. The two beams interfere at A and the corresponding effect is observed by means of an oscilloscope, which is the essential part of a detecting

Card 1/6

30313

Radio interferometer for measuring ... S/115/61/000/010/002/005
E198/E135

system (9) shown surrounded by a dotted line. The frequency of the generator is stabilised in part (3) containing a volume resonator of high quality and checked in the measuring system (1) consisting of a highly stable quartz generator, operation on 100 kc/s, a frequency multiplier and a counter. As the instrument operates at two different distances between the outlet lens and the mirror (the difference being the distance measured), the amplitudes of the two reflected signals must be made equal without change of phase, which is ensured by the attenuator. The measuring carriage (4) moving along the axis of displacement is equipped with three microscopes, two of which serve to maintain the mirror in the required direction and the third being used for observing the marks on fixed mark measures. The measure tested is fixed along the rails on special blocks below the carriage. For measuring interior gauges two stays and a reading device are fixed to the rails. The principle of the instrument resembles very much that of an optical interferometer; it must however be mentioned that, as the frequency stability cannot be obtained as high as in the case of the latter, the frequency should be calculated depending on the

X

Card 2/6

prevailing conditions, from the formula

$$\lambda = \frac{c}{nf} \qquad (1)$$

where: c - velocity of light; λ - wavelength; f - frequency; n - refractive index of air. The correct value of the length measured, L_x, reduced to normal conditions, can be obtained from the formula:

$$L_x = L_N + \Delta m\frac{\lambda}{2} - A \pm \Delta L_t \pm c_n + \delta \qquad (2)$$

where: L - nominal or approximate value of the length; $\Delta m\frac{\lambda}{2}$ - computed fraction of the length in mm; A - readings of the reading device; ΔL_t - correction for the linear expansion of the measure; c_n - correction for the refractive index of air and water vapour; δ - correction for diffraction. Values of the refractive indexes, corrected for temperature and pressure, and diffraction have been taken from tables or worked out according to known formulae and nomographs were prepared and used for quick calculation of ΔL_t, c_n and δ. A series of

30313
S/115/61/000/010/002/005
E198/E135

Radio interferometer for measuring ...

measurements have been carried out with success, although the conditions in which the work proceeded were difficult in some respects, e.g. the lack of a thermostatic installation which necessitated a number of additional precautions and supplementary calculations. However, the method proved to be reliable for the lengths up to about 30-40 m. To minimize the influence of the waves' reflection from the walls and other objects, adsorbers of wooden planks and shields were used, so placed as to disperse the incident energy as much as possible. Moreover, each measurement was made twice with a displacement equal to λ/4. The mean square error for all the results obtained amounted to $1.6 - 2.0 \times 10^{-6}$. Further improvement in the accuracy of measurement can be obtained by carrying out the process in thermostatic surroundings, improving the determination of the refractive index of water vapour and of the diffraction error, as well as further improvements in the construction of the particular parts of the radio interferometer. All these tasks are being currently worked on in the USSR. The aim is to achieve an accuracy not lower than $2 - 5 \times 10^{-7}$.

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Card 4/6

30313

Radio interferometer for measuring .. S/115/61/000/010/002/005
E198/E135

[Abstractor's note: Condensed translation.]
There are 1 figure, 3 tables and 7 references: 4 Soviet-bloc and 3 non-Soviet-bloc. The English language references read:

Ref.2: K.D. Froome, Proceedings of the Royal Society, 1952, ser. A, v.213, No.1112

Ref.3: K.D. Froome, Proceedings of the Royal Society of London, 1954, v.223.

Ref.6: L. Essen and K.D. Froome, Nature, 1951, v.167, No.4248.

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Card 5/6

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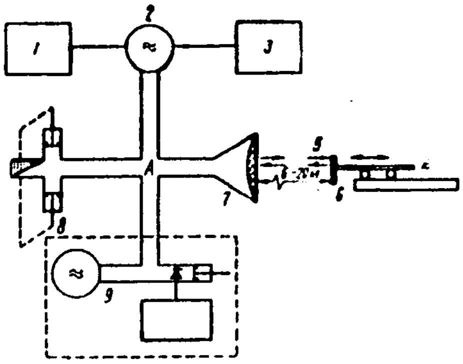
Radio interferometer for measuring .... S/115/61/000/010/00[illegible]/00
E198/E135

Fig.



Card 6/6

S/115/62/000/004/001/007
E194/E154

AUTHOR: Simkin, G.S.

TITLE: The normal law of distribution of measurement errors

PERIODICAL: Izmeritel'naya tekhnika, no.4, 1962, 3

TEXT: Random errors of measurement do not necessarily follow a Gaussian distribution. The probability of a measurement lying between certain limits is first considered and if the error distribution law is unknown Chebyshev's expression may be used:

$$P(-\gamma\sigma < A-x < \gamma\sigma) > 1 - \frac{1}{\gamma^2} \qquad (1)$$

where: σ is the standard deviation; x is the number of measurements. Results obtained by this formula are compared with errors calculated according to the distributions of Gauss, Student, Maxwell, Jeffreys, Pearson and Poisson, and it is shown that differences can be considerable; it is therefore important to know the error distribution law. Knowledge of the error distribution law is also necessary in calculating the total

Card 1/2

The normal law of distribution of ... S/115/62/000/004/001/007
E194/E154

error of a series of consecutive steps. If either the error distribution law for the last step or the total error are unknown, expression (1) may still be used to obtain an approximate answer. But as the distribution law is often unknown it is hardly justifiable to reject 'doubtful' results as defined according to criteria based on the Gaussian distribution. Calculations that implicitly assume a Gaussian distribution are also suspect.
There is 1 table.

Card 2/2

S/0000/64/000/000/0357/0359

ACCESSION NR: AT4042611

AUTHOR: Simkin, G. S., Lukin, I. V.

TITLE: Measurement of large lengths by radiointerferometry in the centimeter range

SOURCE: Soveshchaniye tochnosti, vzaimozamenyayemosti i tekhnicheskim izmereniyam v mashinostroyenii, 2d, 1962. Tochnost', vzaimozamenyayemost' i tekhnicheskiye izmereniya v mashinostroyenii (Precision, interchangeability and technical measurements in machine building); trudy* soveshchaniya. Moscow, Izd-vo Nauka, 1964, 357-359

TOPIC TAGS: measuring instrument, length measurement, radiointerferometry

ABSTRACT: The centimeter-band electromagnetic wave sources developed during the last 20 years are now permitting the use of interference for the measurement of lengths attaining several tens of meters. The authors describe the two-beam radiointerferometer, with one closed arm, working in the centimeter wave band, developed at the Khar'kovskiy Gosudarstvenny*y Institut Mer i Izmeritel'ny*kh Priborov (State Institute of Measures and Measuring Devices in Khar'kov). The schematic arrangement of the interferometer and a photograph of its transmitting part are shown. After stabilization, the electromagnetic energy is split into two parts, one of which is used for exact measurement of

Card 1/2

L 13615-65 ASD(a)-5/AAEM(c)
ACCESSION NR: AP4046786 S/0115/64/000/008/0009/0013

D

AUTHOR: Simkin, G. S.

TITLE: Effect of various laws of error distribution on the correctness of checking measures and instruments

SOURCE: Izmeritel'naya tekhnika, no. 8, 1964, 9-13

TOPIC TAGS: measurement theory, measuring instrument, measuring error

ABSTRACT: The assumption is made that a set of systematic errors of a group of measures or instruments subject to checking and a set of systematic errors of a group of reference (standard) measures or instruments obey two definite differential laws of error distribution. A discrepancy between the numbers of false checks of measures or instruments calculated from the normal distribution law and the other distribution laws is determined. Nine curves of error distribution — a Gaussian curve, 3 symmetrical curves with different positive excesses,

Card 1/2

L 13615-65

ACCESSION NR: AP4046786

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3 symmetrical curves with different negative excesses, and 2 asymmetrical curves with excesses (Jeffris, Simpson, Maxwell) -- are analyzed. An Editorial Comment qualifies some of the author's results. Orig. art. has: 17 formulas and 5 tables.

ASSOCIATION: none

ENCL: 00

SUBMITTED: 00

OTHER: 000

NO REF SOV: 003

SUB CODE: IE

Card 2/2

GAFANOVICH, G.Yu.; SIMKIN, G.S.

Increasing the precision of testing and certification of gear-involute meters. Izm. tekh. no.8:4-6 Ag '65. (MIRA 18:9)

SIMKIN, G.S.; GAFANOVICH, G.Ya.

Electric contact device for measuring small holes. Izm. tekh. no.2:21-23 F '65. (MIRA 18:6)

SIMKIN, L.E.

The VZPL-1 automatic continuous line. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch. i tekh.inform. no.8:23-24 '62. (MIRA 15:7)
(Grinding machines) (Automation)

SIMKIN, L.E.

The BZ-71 semiautomatic machine for grinding shaped sharply pointed cutters. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. no.11:57-59 '62. (MIRA 15:11)

(Grinding machines)

SIMKIN, M.L., inzh.

Driving-in of grounding devices using a vibrational-impact technique. Energetik 12 no.1:32-33 Ja '64. (MIRA 17:3)

SIMKIN, M.M. (Moskva)

Application of digital computers in automatic control systems.
Avtom.i telem.17 no.2:180-190 F '56. (MIRA 9:7)
(Automatic control) (Electronic calculating machines) (Electronic control)

GUREVICH, I.G.; SIMKIN, M.M.; ATABEKOV, G.I., doktor tekhnicheskikh nauk, professor, redaktor; BARMICHEV, V., redaktor; ALEKSANDROVICH, Kh., tekhnicheskiy redaktor.

[Crystal triodes and their uses] Kristallicheskii triod i ego primenenie. Pod.red.G.I.Atabekova, Minsk, Izd-vo Akad.nauk BSSR, 1957. 219 p. (MIRA 10:5)

(Transistors)

S/020/60/131/06/26/071
B014/B007

AUTHOR: **Simkin, M. M.**

TITLE: Periodic Modes of Operation in Systems With Nonlinear Pulse Elements

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 6, pp. 1323 - 1326

TEXT: The author discusses the scheme shown in Fig. 1, and represents the input signal by means of formula 2 in complex form. He gives the equation for the periodic mode of operation, in which the frequency characteristic according to formula (3) occurs. For the complex amplitude of the first harmonic of the pulse element reaction to signal (2), formula (6) is developed. This formula describes the complex amplitude of the first harmonic at the output of a pulse amplitude element. Investigation of a nonlinear amplitude pulse element (Fig. 2) is carried out on the assumption of a connection in series of an ordinary nonlinear element, an ideal pulse element, and a forming device. It follows from the results obtained that the complex amplitude of the first harmonic at the output of the nonlinear amplitude pulse elements is the sum of the amplitudes of the first harmonic and the high-frequency components of the reaction of the ordinary nonlinear element.

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Card 1/2

S/103/61/022/011/007/014
D271/D306

16.4000

AUTHOR: Simkin, M. M. (Moscow)

TITLE: Harmonic balance method in non-linear pulse systems

PERIODICAL: Avtomatika i telemekhanika, v. 22, no. 11, 1961, 1482-1492

TEXT: The purpose of the paper is to expand the use of the harmonic balance method to non-linear pulse systems. Non-linear systems are considered with the non-linearity confined to pulse elements. There is no reduction of harmonics by filtering between non-linear and linear parts, and components of combination frequencies are of great importance in the signal formed at the output of the non-linear element. A system is shown composed of a non-linear pulse element and a linear part. The non-linearity is characterized by the modulation characteristics of the pulse element which relate discrete values at the input to the output; other features of the non-linearity are the repetition frequency and the nominal amplitude of the output pulse. Periodic processes are due to the non-linearity

B

Card 1/3

Harmonic balance method ... S/103/61/022/011/007/014
D271/D306

and their frequency is a sub-multiple of the repetition frequency. It is assumed that constant component does not exist. All possible frequencies are known beforehand and the problem is reduced to determining whether a given system can be excited at a given frequency. The output of the pulse element is the result of modulation of a carrier sequence of pulses, and its first harmonic is the result of modulation of the first harmonic of the sequence. Shaping circuits can be used for matching the "pulse" and "continuous" parts of non-linear systems so that level of high frequency components at the output of the linear part is practically the same as at the output of the linear part of the usual non-linear system. When the bandwidth of the linear part is narrowed, the success of the harmonic balance method is enhanced in computations of pulse detection systems, converters of discrete into continuous data, etc. There are 7 figures and 16 references: 13 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: R. E. Kalman, Proceedings of the Symposium on Non-linear Circuit Analysis, v. 6, Polytechnic Institute of Brooklyn, 1956;

Card 2/3

Harmonic balance method ...
S/103/61/022/011/007/014
D271/D306

C. K. Chow, AIEE Transactions, v. 71, pt. 2, 1954.

SUBMITTED: December 16, 1960

√B

Card 3/3

SIMKIN, M.M.

Complex steady motions in nonlinear pulse systems. Dokl.AN SSSR 149 no.3:586-588 Mr '63. (MIRA 16:4)

1. Institut avtomatiki i telemekhaniki AN SSSR. Predstavleno akademikom V.S.Kulebakinym.

(Electric circuits) (Automatic control)

SIMKIN, M.M.

Physical nature of steady-state motion in nonlinear pulse systems.
Dokl. AN SSSR 159 no.6:1284-1286 D '64 (MIRA 18:1)

1. Institut avtomatiki i telemekhaniki AN SSSR. Predstavleno akademikom V.S. Kulebakinym.

[illegible]

15677 [illegible]

Za ekonomiyu topliva i elektroenergii.
Tekh. il. Prom-st', 1948, No. [illegible], s. 35-3[illegible].

SO: Letopis' Zhurnal'nykh Statey, No. 30, Moskva, 1948

SIMKIN, M. YE.

PA 48/49T38

USSR/Engineering Feb 49
Peat
Boilers

"Some Results of Industrial Use of Peat for Heating Small-Capacity Steam Boilers," M. Ye. Simkin, Engr, B. M. Cherkinskiy, 4 pp

"Za Ekonomiyu Topliva" No 2

Obtained satisfactory results by using peat with moisture content of 53% together with a cold air blast. Special grates in the furnace permit use of peat with 60% moisture content. Low ashing rate facilitated cleaning of furnace. Small

LC 48/49T38

USSR/Engineering (Contd) Feb 49

adjustments to grating make it possible to use any form of peat.

LC 48/49T38

SIMKIN, ENG. M. YE.
ZHITENEV, ENG. S. E.
CHERKINSKIY, ENG. B. M.

Furnaces - Construction

Using the Vasil'ev-type mechanical furnaces in boiler rooms without ash pits. Za ekon. top. 9 no. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

Simkin, M. Ye.

CHERKINSKIY, Boris Mendeleyevich; TOKAREV, Dmitriy Georgiyevich; SHAPKIN, Il'ya Fedorovich; ZOTOV, Petr Petrovich; SIMKIN, M.Ye., redaktor; PLEMYANNIKOV, M.N., redaktor; BAKASTOV, V.N., retsenzent; BRAZHKIN, M.I., retsenzent; MOTORIN, I.V., retsenzent; RATTEL', K.N., retsenzent; SHVYREV, S.S., retsenzent· NEKRASOVA, O.I., tekhnicheskiy redaktor

[Manual of power engineering for the textile industry] Spravochnik energetika tekstil'noi promyshlennosti. Moskva, Gos.nauchno-tekhn. izd-vo Ministerstva tekstil'noi promysh. SSSR. Vol.2.[Thermotechnics] Teplotekhnika. Pod red.M.E.Simkina. 1955. 510 p. (MIRA 9:2)
(Thermodynamics)

SIMKIN, M. Ye.; CHERKINSKIY, B.M.

In favor of a widespread introduction of gas driers. Tekst.prom. 15 no.11:43-44 N '55. (MIRA 9:1)

(Drying apparatus--Textile fabrics)

BAKAKIN, Sergey Anatol'yevich; SIMKIN, M.Ye., red.; KOZLENKO, L.B., red.; LEVITSKAYA, N.N., tekhn. red.

[Insulation of heat-using apparatus in textile finishing factories] Izoliatsiia teploizpol'zuiushchei apparatury otdelochnykh fabrik tekstil'noi promyshlennosti. Pod red. M.E.Simkina. Moskva, Izd-vo nauchno-tekhn. lit-ry RSFSR, 1960. 62 p. (MIRA 14:5)
(Textile factories--Equipment and supplies)
(Insulation (Heat))

SIMKINA, R.G.

Ecology of the hydropolyp Perigonimus megas Kinne, a new species in the fauna of the U.S.S.R. Trudy Inst. okean. 70:216-224 '63.
(MIRA 17:7)

SIMKIN, S.M.

Idealization of geological processes. Izv. AN SSSR. Ser. geol. 29 no.11:103-110 N '64. (MIRA 17:12)

SIMKIN, S M

YEMEL'YANOV, V.S., otv.red.; BARDIN, I.P., red.; VINOGRADOV, A.P., red.; GOL'DANSKIY, V.I., red.; GULYAKIN, I.V., red.; DOLIN, P.I., red.; YEFREMOV, D.V., red.; KRASIN, A.K., red.; LEBEDINSKIY, A.V., red.; MINTS, A.L., red.; MURIN, A.N., red.; NIZE, V.E., red.; NOVIKOV, I.I., red.; SEMENOV, V.F., red.; SOBOLEV, I.N., red.; BAKHAROVSKIY, G.Ya.; nauchnyy red.; BERKOVICH, D.M., nauchnyy red.; DANOVSKIY, N.F., nauchnyy red.; DELONE, N.N., nauchnyy red.; KON, M.A., nauchnyy red.; KOPYLOV, V.N., nauchnyy red.; MANDEL'TSVAYG, Yu.B.: MILOVIDOV, B.M., nauchnyy red.; MOSTOVENKO, N.P., nauchnyy red.; MURINOV, P.A., nauchnyy red.; POLYAKOV, I.A., nauchnyy red.; PREOBRAZHENSKAYA, Z.P., nauchnyy red.; RABINOVICH, A.M., nauchnyy red.; SIMKIN, S.M., nauchnyy red.; SKVORTSOV, I.M., nauchnyy red.; SYSOYEV, P.V., nauchnyy red.; SHORIN, N.A., nauchnyy red.; SHREYBERG, G.L., nauchnyy red.; SHTEYNMAN, R.Ya., nauchnyy red.; KOSTI, S.D., tekhn.red.

[Concise atomic energy encyclopedia] Kratkaia entsiklopediia "Atomnaia energiia." [___.Tables of isotopes (according to published data available at the beginning of 1958)] ___Tablitsa izotopov (po dannym, opublikovannym k nachalu 1958. 12 p. Gos. nauch. izd-vo "Bol'shaia sovetskaia entsiklopediia," 1958. 610 p. (MIRA 12:1)

1. Sotrudniki Bol'shoy Sovetskoy Entsiklopedii (for Bakharovskiy, Berkovich, Danovskiy, Delone, Kon, Kopylov, Mandel'tsvayg, Milovidov, Mostovenko, Murinov, Polyakov, Preobrazhenskaya, Rabinovich, Simkin, Skvortsov, Sysoyev, Shorin, Shreyberg, Shteynman).
(Atomic energy)

VORONEL', A.V.; CHASHKIN, Yu.R.; POPOV, V.A.; SIMKIN, V.G.

Measurement of the heat capacity C_v of oxygen near the critical point. Zhur. eksp. i teor. fiz. 45 no.3:828-830 S '63.
(MIRA 16:10)

1. Institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy.
(Oxygen--Thermal properties)

RYBNIKOV, V.A., kand.tekhn.nauk; SIMKIN, V.I., inzh.

Properties of siliceous magnesite. Ogneupory 18 no.2:76-80 F '53. (MIRA 11:10)

1. Leningradskiy institut ogneuporov.
(Magnesite)

RYBNIKOV, V.A., kand.tekhn.nauk; SIMKIN, V.I., inzh.

Properties of magnesite and chrome magnesite bricks made of silica magnesite. Ogneupory 19 no.1:14-17 '54. (MIRA 11:8)

1.Leningradskiy institut ogneuporov.
(Firebrick--Testing) (Magnesite)

15(2) SOV/131-59-2-4/16

AUTHOR: Simkin, V. I.

TITLE: The Burning of Difficultly Sintering Dolomites in the Rotary Furnace According to the Dry Method (Obzhig trudnospekayushchikhsya dolomitov vo vrashchayushcheysya pechi po sukhomu sposobu)

PERIODICAL: Ogneupory, 1959, Nr 2, pp 57-62 (USSR)

ABSTRACT: In the present paper the experimental results of fractional burning of difficultly sintering dolomites of the Temir-Tau Deposit without and with addition of iron ore or scale in the industrial rotary furnace of the Shop for Refractories of the Kuznetskiy metallurgicheskiy kombinat (Kuznetsk Metallurgical Kombinat) are mentioned. The following persons took part in the investigations: D. S. Draznin from the Vsesoyuznyy institut ogneuporov (All-Union Institute of Refractories), M. S. Pilipenko, D. A. Konstantinovich, Ye. P. Mishchenko, V. T. Nemnokova (Ref 1) from the Kuznetsk Metallurgical Kombinat. According to their chemical composition all dolomite samples comply with the technical standards MPTU 2660-50. Prior to burning in industrial furnaces laboratory experiments were carried out for the determination of optimum wetting

Card 1/2

conditions which are described in detail. A scheme of the preparation of raw material and of the furnace charge is equally mentioned. The characteristics of raw and burnt dolomites may be seen from tables 1 and 2. The properties of dolomite which was taken from the preheating and calcination zones of the furnace during its shut down are mentioned in tables 3 and 4. Conclusions: gray and other pure varieties of dolomite of the Temir-Tau Deposit which do not crumble at decarbonization temperatures can be burnt in the rotary furnace according to the dry method with an addition of 2% iron ore scale. Dolomite with a content of 4-5% silica and oxides, among them 1.5% Fe_2O_3 can be burnt without addition. Dolomite can be best burnt at a grain size of 30-4 mm with an addition of uncrushed iron scale. If iron ore is added it should be powdered and wetted before it is introduced. There are 1 figure and 4 tables.

ASSOCIATION: Vsesoyuznyy institut ogneuporov (All-Union Institute of Refractories)

Card 2/2

SIMKIN, V.I.

Industrial design solutions for lightweight grog products with burning-out additives. Ogneupory 28 no.12:543-546 '63. (MIRA 16:12)

1. Vsesoyuznyy institut ogneuporov.

SIMKIN, V. S.

Dust elimination from places where loose materials fall. TSement 29 no.2:10-11 Mr-Ap '63. (MIRA 16:4)

1. Yuzhgiprotsement.

(Cement plants) (Dust—Prevention)

SIMKIN, V. Ya.

Electric Relays.

Use of overload relays in urban cable networks. Rab. energ., 1, No. 2, 1951.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

KOROLEV, S.; SIMKIN, Ye.; PLIESMANE, I.[translator]; LIELPETERS, P.,
red.; BALODIS, A., tekhn. red.

[Second goal for 1963] Otro robezlikiju - 1963 gada. Riga,
Latvijas Valsts izdevnieciba, 1963. 21 p. (MIRA 16:5)
(Latvia--Stock and stock breeding--Economic aspects)

112-2-2878

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 2, p.45 (USSR)

AUTHOR: Simkin, E. L.

TITLE: Adjusting the Electromechanical Burning Process Regulators of a ЦКТИ System in Boilers Operating on Natural Gas (Naladka elektromekhanicheskikh regulyatorov protsessa goreniya sistemy ЦКТИ na kotlakh, rabotayushchikh na prirodnom gaze)

PERIODICAL: Naladochnyye i eksperim. raboty ORGRES, 1956, Nr 12, pp. 44-46

ABSTRACT: When burning gas, entirely satisfactory results are obtained using the simplest system of regulating the "fuel-air" ratio. The fuel feed is measured by 1) the position of the gas valve shaft (only with individual setting of the gas pressure controller for each boiler); 2) by the pressure drop on the measuring diaphragm; 3) by the gas pressure behind the gas burners (but only when the position of the valves in the gas pipes leading to the burners remains constant). The second variant is the system most widely used. It is recommended that an individual tube be used to transform the pressure drops on the measuring disk into an equivalent pressure of an air

Card 1/2

112-2-2878

Adjusting the Electromechanical Burning Process Regulators of a System in Boilers Operating on Natural Gas. (cont.)

rheostat. Experience has shown that this is attended with difficulties: Poor measuring- membrane damping and poor regulator sensitivity. These shortcomings can be eliminated by further adjustments and satisfactory operation of the regulating system as a whole can be attained. V.D.M.

ASSOCIATION: Office for the Organization and Standardization of Regional Electric Power Plants and Networks (ORGRES).

Card 2/2

112-2-2880

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 2, p. 45 (USSR)

AUTHOR: Simkin, Ye. L.

TITLE: Air Regulator Malfunction Caused by a Change in the Number of Operating Drum Ball Mills (Narusheniya raboty regulyatora vozdukha svyazannyye s izmeneniyem chisla rabotayushchikh sharovykh barabannykh mel'nits)

PERIODICAL: Naladochnyye i eksperiment. raboty ORGRES, 1956, Nr 12, pp. 56-60

ABSTRACT: The use of a combustion-control system based on regulation of the fuel-air ratio leads to serious malfunctioning when one of the drum ball mills servicing a given boiler is disconnected. This is due to the change in the quantity of fuel and air flowing from the cyclones. The resulting malfunctioning appears as an increased air excess of 6 to 9 per cent for maximal, and of 10 to 15 per cent for minimal boiler loads. An additional malfunction of the same nature, (4.4 to 9.6 per cent) is due to the admixture of cold air at the input to the primary blower of the idle mill which is necessary for safe mill operation. It is possible to correct this malfunctioning by installing an additional manually operated impulse air rheostat. V.D.M.

Card 1/1

SOV/122-58-12-9/32

AUTHORS: Popov, G.V., Candidate of Technical Sciences, and
~~Simkin, Ye.~~L., Engineer

TITLE: Pneumatic Hoist PP-500 (Pnevmaticheskiy pod"yemnik PP-500)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 12, p 29

ABSTRACT: A pneumatic motor, situated inside the cable drum, drives the drum through a 2-stage planetary reduction gear with a transmission ratio of 200:1. The hoist is push-button controlled, has a load capacity of 500 kg and a maximum lift of 6 m. At 5 at. air pressure, the motor has an output of 0.73 hp at 2100 rpm, when lifting, and of 0.16 hp at 2700 rpm, when lowering. Lifting speeds are 2.7-5.4 m/min and lowering speeds are 3-3.4 m/min. The air consumption is 0.7 free m^3/min. The hoist measures 260x490x340 mm with a carriage for manual displacement along an I-beam and weighs 36 kg. There are 2 figures (including 1 photograph)

Card 1/1

ZAMORA, T.P., inzh.; LABIY, Yu.Ya., inzh.; SIMKIN, Ye.L., inzh.; SIDOROV, P.A., inzh.

Automatic control of boilers with ball barrel mills without an intermediate dust bin. Elek.sta. 31 no.4:16-19 Ap '60. (MIRA 13:7)

(Boilers) (Automatic control)

ZELENETSKIY, Sergey Borisovich, kand. tekhn. nauk; SIMKIN, Yevel' Leybovich, inzh.; SUKHOV, I.V., inzh., red.; FREGER, D.P., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Rotary pneumatic motors; design and construction] Rotatsionnye pnevmaticheskie dvigateli - raschet i konstruirovanie; stenogramma lektsii, prochitannykh na seminare. Leningrad, 1961. 65 p. (MIRA 15:5)

(Machine tools--Pneumatic driving)

SIMKIN, Ye.L., inzh.

Providing safety of operations with powered instruments. Sudostroenie 28 no.5:42-45 My '62. (MIRA 15:7)
(Shipbuilding--Equipment and supplies)
(Machine tools--Safety appliances)

SIMKIN, Yevel' Leybovich; VIL'NER, G.S., inzh., retsenzent;
RYCHIN, S.A., inzh., retsenzent; ANDREYEVA-GALANINA,
Ye.TS., prof., nauchn. red.; MISHKEVICH, G.I., red.

[Safety measures in working with pneumatic hand tools
in shipbuilding] Tekhnika bezopasnosti pri rabote s
ruchnym pnevmaticheskim instrumentom v sudostroenii.
Leningrad, Sudostroenie, 1964. 60 p. (MIRA 18:2)

[illegible] EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1)

ACC NR: AP6029993 (A, N) SOURCE CODE: UR/0413/66/000/015/0131/0132

AUTHOR: [illegible]kov, L. G.; Rutskiy, V. V.; Siskin, Yo. L.; Rubin, A. Ya.; Narinskiy, N. I.; [illegible], S. A.; Shaknovnina, G. V.; Chalov, V. S.; Rabinov, A. I.; Pivkov, P. M.; Ivanov, K. V.

ORG: none

TITLE: Movable apparatus. Class 49, No. 184584

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 131-132

TOPIC TAGS: metalworking, gas welding, metal welding, welding equipment, welding technology, milling machine

ABSTRACT: This Author Certificate presents a movable apparatus for machining the edges prior to welding two large objects. The apparatus contains a milling head mounted on self-propelled carriages. The head is fed axially along the outline of a detail by a pantographic copying mechanism. To increase the efficiency and the accuracy in milling the edges located on any plane upon an immovable structure, the self-propelled carriages are placed on the surfaces being machined (see Fig. 1). The apparatus itself is provided with an auxiliary milling head for machining the opposite edge facing the first one. The edges are separated by gas cutting torches placed in front of the moving apparatus.

UDC: 621.914.37-182.3:621.791.945.021

Card 1/2

[illegible]

ACC NR: AP6029953

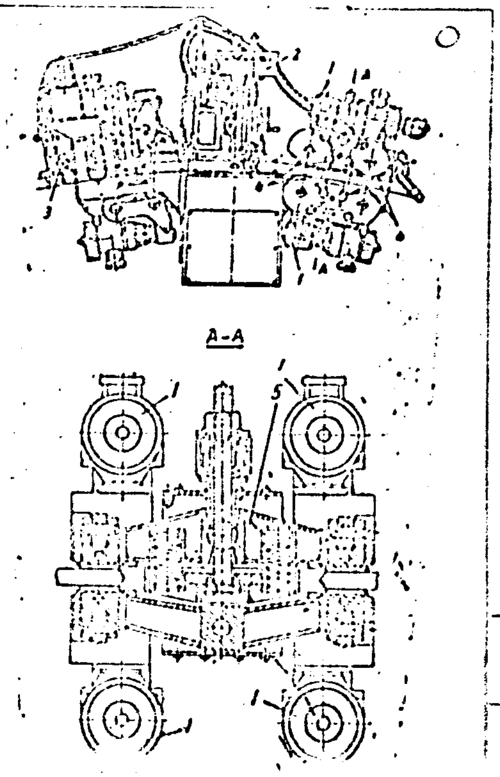

Fig. 1. 1 - self-propelled carriages; 2 - milling heads; 3 - gas cutting torches; 4 - running rollers; 5 - coupling device

Orig. art. has: 1 figure.

[illegible] SUBM DATE: 20May64